

Claims

Sub C 1. A tray for carrying a magnetic head for magnetic disks which comprises an arm part, a head chip attached to the tip of the arm part, and a lead wire connected to the head chip, characterized in that

the tray is one obtained by molding a conductive thermoplastic resin composition, and

when the tray is immersed in 500 ml of pure water while applying 40 kHz ultrasonic thereto for 60 seconds, the number of particles having a particle diameter of 1 μm or larger which detach from the surface of the tray is 5,000 pcs/cm² or smaller.

2. The tray for carrying a magnetic head for magnetic disks of claim 1, wherein

the conductive thermoplastic resin composition comprises a thermoplastic resin and a conductive loading material, and

the conductive loading material comprises one or more members selected from the group consisting of a polyether type polymeric antistatic agent, a conductive filler, and carbon fibrils.

3. The tray for carrying a magnetic head for magnetic disks of claim 2, wherein

the thermoplastic resin comprises one or more members selected from the group consisting of polycarbonates,

poly(butylene terephthalate), poly(ethylene terephthalate), and polypropylene.

4. The tray for carrying a magnetic head for magnetic disks of claim 2, wherein

the conductive loading material is carbon fibrils having a diameter of 100 nm or smaller and a length/diameter ratio of 5 or higher.

5. The tray for carrying a magnetic head for magnetic disks of claim 1, wherein

when the tray is immersed in 50 ml of pure water while stirring the water at 60°C for 60 minutes, the amount of chlorine ions which dissolve away from the tray is 0.01 μg or smaller per unit surface area (cm^2) of the tray.

6. The tray for carrying a magnetic head for magnetic disks of claim 1,

which has a surface resistance of from 10^3 to $10^{12} \Omega$.

7. A tray for carrying a magnetic head for magnetic disks which comprises an arm part, a head chip attached to the tip of the arm part, and a lead wire connected to the head chip, characterized in that

the tray is one obtained by injection-molding a conductive polycarbonate resin composition, and

the tray has such a surface roughness that the ten-point average roughness (R_z) thereof as determined through

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a measurement employing a cutoff wavelength of 2.5 mm is 5 μm or smaller.

8. A tray for carrying a magnetic head for magnetic disks which comprises an arm part, a head chip attached to the tip of the arm part, and a lead wire connected to the head chip, characterized in that

the tray is one obtained by injection-molding a conductive polycarbonate resin composition,

the tray has a surface resistance of from 1×10^3 to $1 \times 10^{12} \Omega$, and

the tray has such a surface roughness that in a measurement employing a cutoff wavelength of 2.5 mm, the proportion of 10%-cutting-level load length (tp) is 1% or higher and the count of peaks not smaller than $\pm 0.1 \mu\text{m}$ based on the center line (Pc) is 100 or smaller per cm of the length of measurement.

9. The tray for carrying a magnetic head for magnetic disks of claim 8, wherein

in the measurement employing a cutoff wavelength of 2.5 mm, the ten-point average roughness (Rz) of the tray is from 5 to 50 μm .

10. The tray for carrying a magnetic head for magnetic disks of claim 7 or 8, wherein the conductive polycarbonate resin composition contains conductive fibers having a fiber diameter of 5 μm or smaller and/or a

carbonaceous conductive loading material having a DBP absorption of 100 cc/100/g or higher.

11. The tray for carrying a magnetic head for magnetic disks of claim 7, wherein the conductive polycarbonate resin composition contains carbon fibrils having a fiber diameter of 100 nm or smaller and a length/diameter ratio of 5 or higher.

12. The tray for carrying a magnetic head for magnetic disks of claim 7, which has a surface resistance of from 10^3 to 10^{12} Ω .

Sub C4 13. A tray for carrying a magnetic head for magnetic disks which comprises an arm part, a head chip attached to the tip of the arm part, and a lead wire connected to the head chip, characterized in that

the tray is one obtained by molding a polycarbonate resin composition containing a conductive loading material in an amount of from 0.25 to 50% by weight, and

the amount of a chlorinated hydrocarbon generated from the tray having a surface area of 12.6 cm² under the conditions of a heating temperature of 85°C and an equilibrium time of 16 hours is 0.1 μ g/g or smaller when determined with a head space gas chromatogram.

14. The tray for carrying a magnetic head for magnetic disks of claim 13, wherein

the total amount of all gases generated from the tray having a surface area of 12.6 cm², the amount of methylene chloride generated therefrom, and the amount of a hydrocarbon generated therefrom in a measurement conducted under the conditions of a heating temperature of 85°C and an equilibrium time of 16 hours are 1 µg/g or smaller, 0.1 µg/g or smaller, and 0.5 µg/g or smaller, respectively, when determined with a head space gas chromatogram.

15. The tray for carrying a magnetic head for magnetic disks of claim 13, wherein the conductive loading material is a carbonaceous conductive substance having a DBP absorption of 100 cc/100 g or higher.

16. The tray for carrying a magnetic head for magnetic disks of claim 13, wherein the conductive loading material is carbon fibrils having a diameter of 100 nm or smaller and a length/diameter ratio of 5 or higher.

17. The tray for carrying a magnetic head for magnetic disks of claim 13, which has a surface resistance of from 10³ to 10¹² Ω.

18. The tray for carrying a magnetic head for magnetic disks of claim 13, wherein the polycarbonate resin is a polycarbonate resin which has been purified by dropping into warm water.

19. The tray for carrying a magnetic head for magnetic disks of claim 13, wherein the polycarbonate resin

is a polycarbonate resin obtained by a solvent-free polymerization method.

20. The tray for carrying a magnetic head for magnetic disks of claim 13, which has undergone vacuum degassing during the melt kneading or melt molding of the polycarbonate resin composition.

21. The tray for carrying a magnetic head for magnetic disks of claim 13, which has been annealed at a temperature of from 80 to 140°C for from 30 minutes to 20 hours after molding.

Sub C5 22. A tray for carrying a magnetic head for magnetic disks which comprises an arm part, a head chip attached to the tip of the arm part, and a lead wire connected to the head chip, said tray satisfying at least one of the following (1) to (3):

(1) the tray is one obtained by molding a conductive thermoplastic resin composition and having a surface resistance of from 1×10^3 to $1 \times 10^{12} \Omega$, and

when the tray is immersed in 500 ml of pure water while applying 40 kHz ultrasonic thereto for 60 seconds, the number of particles having a particle diameter of 1 μm or larger which detach from the surface of the tray is 5,000 pcs/cm² or smaller;

(2) the tray has such a surface roughness that in a measurement employing a cutoff wavelength of 2.5 mm, the

proportion of 10%-cutting-level load length (t_p) is 1% or higher and the count of peaks not smaller than $\pm 0.1 \mu\text{m}$ based on the center line (P_c) is 100 or smaller per cm of the length of measurement;

(3) the amount of a chlorinated hydrocarbon generated from the tray having a surface area of 12.6 cm^2 under the conditions of a heating temperature of 85°C and an equilibrium time of 16 hours is $0.1 \mu\text{g/g}$ or smaller when determined with a head space gas chromatogram.

23. A tray for carrying a magnetic head for magnetic disks which comprises an arm part, a head chip attached to the tip of the arm part, and a lead wire connected to the head chip, characterized in that

the tray is one obtained by molding a conductive thermoplastic resin composition and

the tray has a surface resistance of from 1×10^3 to $1 \times 10^{12} \Omega$, and that

when the tray is immersed in 500 ml of pure water while applying 40 kHz ultrasonic thereto for 60 seconds, the number of particles having a particle diameter of $1 \mu\text{m}$ or larger which detach from the surface of the tray is 5,000 pcs/ cm^2 or smaller, or

the tray has such a surface roughness that the ten-point average roughness (R_z) thereof as determined through

a measurement employing a cutoff wavelength of 2.5 mm is 5 μm or smaller, or

the amount of a chlorinated hydrocarbon generated from the tray having a surface area of 12.6 cm^2 under the conditions of a heating temperature of 85°C and an equilibrium time of 16 hours is 0.1 $\mu\text{g/g}$ or smaller when determined with a head space gas chromatogram.

24. A tray for carrying a magnetic head for magnetic disks which comprises an arm part, a head chip attached to the tip of the arm part, and a lead wire connected to the head chip, characterized in that

the tray is one obtained by molding a conductive thermoplastic resin composition and having a surface resistance of from 1×10^5 to $1 \times 10^{12} \Omega$, and

when the tray is immersed in 500 ml of pure water while applying 40 kHz ultrasonic thereto for 60 seconds, the number of particles having a particle diameter of 1 μm or larger which detach from the surface of the tray is 3,500 pcs/ cm^2 or smaller.

25. A tray for carrying a magnetic head for magnetic disks which comprises an arm part, a head chip attached to the tip of the arm part, and a lead wire connected to the head chip, characterized in that

the tray is one obtained by molding a conductive thermoplastic resin composition and having a surface resistance of from 1×10^3 to $1 \times 10^{12} \Omega$,

when the tray is immersed in 500 ml of pure water while applying 40 kHz ultrasonic thereto for 60 seconds, the number of particles having a particle diameter of $1 \mu\text{m}$ or larger which detach from the surface of the tray is 5,000 pcs/ cm^2 or smaller,

the tray has such a surface roughness that the ten-point average roughness (R_z) thereof as determined through a measurement employing a cutoff wavelength of 2.5 mm is $5 \mu\text{m}$ or smaller, and

the amount of a chlorinated hydrocarbon generated from the tray having a surface area of 12.6 cm^2 under the conditions of a heating temperature of 85°C and an equilibrium time of 16 hours is $0.1 \mu\text{g/g}$ or smaller when determined with a head space gas chromatogram.

26. A tray for carrying a magnetic head for magnetic disks which comprises an arm part, a head chip attached to the tip of the arm part, and a lead wire connected to the head chip,

the tray being one obtained by molding a conductive thermoplastic resin composition and having a surface resistance of from 1×10^3 to $1 \times 10^{12} \Omega$, and

the tray having such a surface roughness that in a measurement employing a cutoff wavelength of 2.5 mm, the proportion of 10%-cutting-level load length (tp) is lower than 4%.

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